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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT			ATTY. DOCKET NO. 265036600070	ATTY. DOCKET NO. 265036600070 APPLICANT R. Yanagimachi FILING DATE August 10, 1999		SERIAL NO. 09/371,648 GROUP		
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Gordon, J.W. 77, 7380	et al. Genetic transform	ation of mouse	embryos by microinjecti	on of p	urified DNA.	PNAS U.S.A		
	and F.H. Ruddle (1981). Science 214, 1244	ntegration and	stable germ line transm	nission	of genes inje	ected into mous		
Palmiter, R.	D. and R.L. Brinster (198	6). Germ-line	transformation of mice	. Annı	ı. Rev. Ger	net. 20, 465.		
J.W. Gordon	(1989). Transgenic anima	ls. Int. Rev	r. Cytol. 115, 171.					
Evans, M.J. Nature 2	and M.H. Kaufman (1981). 292, 154.	Establishment	in culture of pluripot	ential	cells from m	ouse embryos.		
Kuehn, M. et mutations	al. (1987). A potential into mice. Nature 326,	animal model 295.	for Lesch-Nyhan syndrom	e throu	gh introduct	ion of HPRT		
	et al. (1985). Insertion h. <i>PNAS U.S.A</i> . 82, 6927		al gpt gene into the g	erm line	e of mice by	retroviral		
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(Including Author, Title, Date, Pertinent Pages, Etc.) OTHER DOCUMENTS

Chan, A.W.S. et al. (1998). Transgenic cattle produced by reverse-transcribed gene transfer in oocytes. PNAS U.S.A. 95, 14028.

Kanegae, Y. et al. (1995). Efficient gene activation in mammalian cells by using recombinant adenovirus expressing site-specific Cre recombinase. Nucleic Acids Res. 23, 3816.

Lavitrano, M. et al. (1989). Sperm cells as vectors for introducing foreign DNA into eggs: Genetic transformation of mice. Cell 57, 717.

Brinster, R.N. et al. (1989). No simple solution for making transgenic mice. Cell 59, 239.

Maione, B. et al. (1998). Spérm-mediated gene transfer in mice. Mol. Reprod. Dev. 50, 406.

Huguet, E. and P. Esponda (1998). Foreign DNA introduced into the vas deferens is gained by mammalian spermatozoa. Mol. Reprod. Dev. 51, 42.

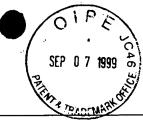
Kimura, Y. et al. (1998). Analysis of mouse oocyte activation suggests the involvement of sperm perinuclear material. Biol. Reprod. 58, 1407.

Wakayama, T. and R. Yanagimachi (1998). Development of normal mice from oocytes injected with freeze-dried spermatozoa. Nature Biotechnol. 16, 639.

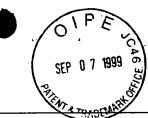
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	et al. (1990). Develop Reprod. 42, 432.	ment of 1-cell e	embryos from differ	ent strains	of mice in	CZB med	lium.
Niwa, H. et a	al. (1991). Efficient sel , 193.	ection for high	-expression transfe	ectants with	a novel euk	aryoti	c vector.
Zhang, G.,et mammalian	al. (1996). An enhanced cells. <i>Biochem</i> . <i>Biop</i>	green fluoresce hys. Res. Coπ	nt protein allows s wnun. 227, 707.	ensitive de	tection of g	ene tr	ansfer in
	t al. (1997). Selective p Biotechnol. 15, 458.	production of tr	ansgenic mice using	green fluo	rescent prote	in as	a marker.
Wakayama, T. cryoprese	et al. (1998). Product rved with or without cryo	ion of normal of opprotection. J	fspring from mouse Reprod. Fertil	oocytes in 1. 112, 11.	jected with	spermat	:ozoa
	t al. (1996). Transĝenesi nol. 14, 982.	s by adenovirus-	mediated gene trans	sfer into mo	use zona-free	e eggs.	Nature
Lavitrano, M 161.	. et al. (1992). The inte	eraction between	exogenous DNA and	sperm cells	. Mol. Rep	orod.	Dev. 31,
Bos-Mikich, blastocys	A. et al. (1997). Meiot ts. <i>Dev. Biol</i> . 182, 1	ic and mitotic C 72.	Ca ²⁺ oscillations as	ffect cell o	composition	in resu	lting
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Longo, F.J. A novel	OTHER DOCUMENTS (I et al. (1987). Basic pro class of cytoskeletal ele	oteins of the pe	, Title, Date, Per crinuclear theca of 11 Biol. 105, 110	mammalian :		and spermatids:	
exogenous	et al. (1997). Activation DNA and Cell Bi	lol. 16, 1087.	membrane lipids in l	bull spermat	ozoa: heter		
1 ———	domains and rigidification (1998). The green fluore			 			
Kroll, K.L. signaling	and E. Amaya (1996). Tra requirements during gast	ansgenic <i>Xenopu</i> crulation. <i>Dev</i>	us embryos from spe elopment 122, 317	erm nuclear 73.	transplantat	ions reveal FGF	
R. Yanagimac ed. 2, pp	hi (1994) <u>in</u> Thé <i>Physio</i> . 5. 189-317.	logy of Repro	duction, E. Knobil	and J.D. Ne	eill, Eds. F	Raven Press, NY,	
	al. (1990). Fertilisation ec. 127, 517.	n of bovine ooc	ytes by the inject	ion of immob	ilised, kill	ed spermatozoa.	
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Kimura, Y. a	nd R. Yanagimachi (1995).	Intracytoplasm	ic sperm injection	in the mouse	. Biol. Re	eprod. 52, 709	
oocyte su Yanagimachi,	et al. (1997). The remourface during fertilization. R. and Y.D. Noda (1970).	n. Developme Electron micr	ental Biol. 188,	75.			
	B. et al. (1998). Transger Nature Biotechnol. 16,		ric offspring produ	uced from so	matic ell-de	erived stem-lik	
Usui, N. (19 stage of 44, 132.	996). Morphological differ incorporation into immatur	rences in nuclea re oocytes, matu	r materials release re oocytes, or fert	ed from hams ilized eggs.	ter sperm he Mol. Rep	eads at an earl orod. Develop	
Perry, A.C.F May 14,	. et al. (1999). Mammalia 1999.	n transgenesis	by intracytoplasmi	c sperm inj	ection. <i>Sci</i>	ence 284, 118 0	
Hagmann, M.	(1999). Fertility therap	by may aid gene	transfer. Science	ce 284, 1097	7. May 14,	1999.	
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APPLICANT

R. Yanagimachi

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TRANSLATION
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AP)

Inoue, K. & Yamashita, S. The Techniques Using Electroporation to Generate Transgenic Fish. in Transgenic Animals: Generation and Use, p. 129-132, France: harwood academic publishers (1977).

PP

Lavitrano, M. et al. Interaction between sperm cells and exogenous DNA: sperm mediated gene transfer. Cell Biology International 18: 464 (1994).

OP

Lavitrano, M. et al. Sperm-mediated gene transfer: production of pigs transgenic for a human regulator of complement activation. *Transplantation Proceedings* 29: 3508-3509 (1997).

M

Nakanishi, A. & Iritani, A. Gene transfer in the chicken by sperm-mediated methods. Molecular Reproduction and Development 36: 258-261 (1993).

00

Niemann, H. A survey of sperm-mediated DNA-transfer in farm animals. Proceedings of the Third International Conference on Boar Semen Preservation: Boar Semen Preservation III 31: 211-216 (1996).

00

Reventos, J. & Munell, F. Transgenic animal models in reproductive endocrine research. European Journal of Endocrinology 136: 566-580 (1997).

M

Schellander, K. & Berm, G. The Direct Gene Transfer Through Mammalian Spermatozoa in Transgenic Animals: Generation and Use, p. 41-44, France: harwood academic publishers (1977).

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Xin, S.Y. et al. The production of transgenic sheep by sperm mediated gene transfer method. Cell Biology International 18: 464 (1994).

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